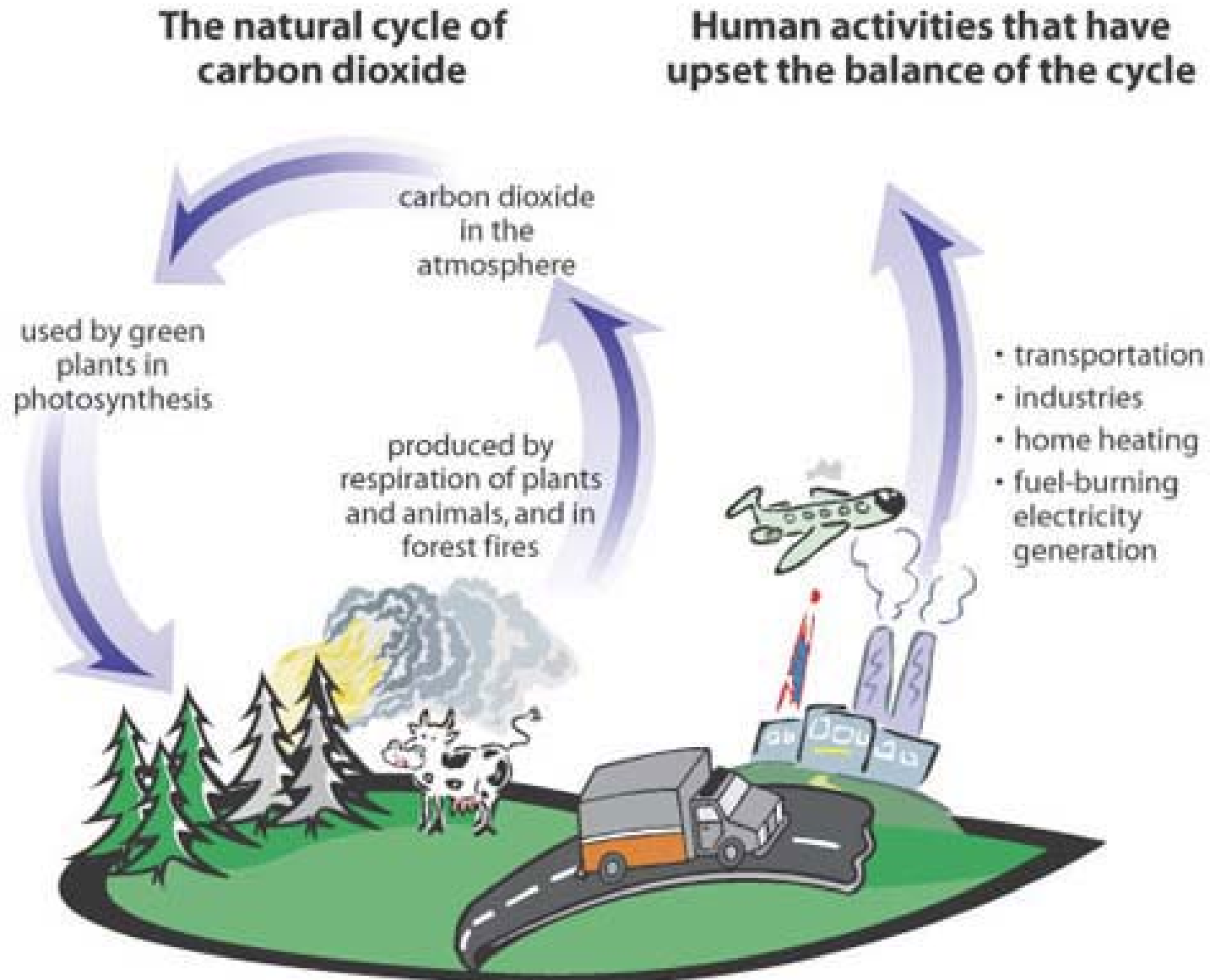


# Local Governments & Climate Change



Heather Filiberto  
Tompkins County Planning Department  
June 12, 2004

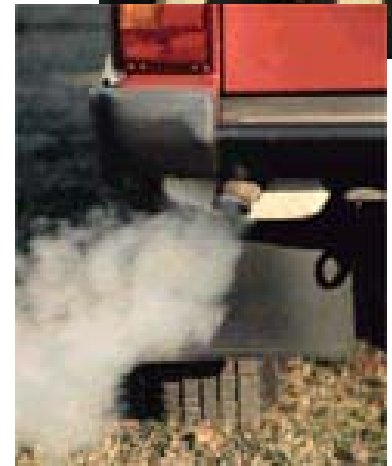
# What Is Climate Change?



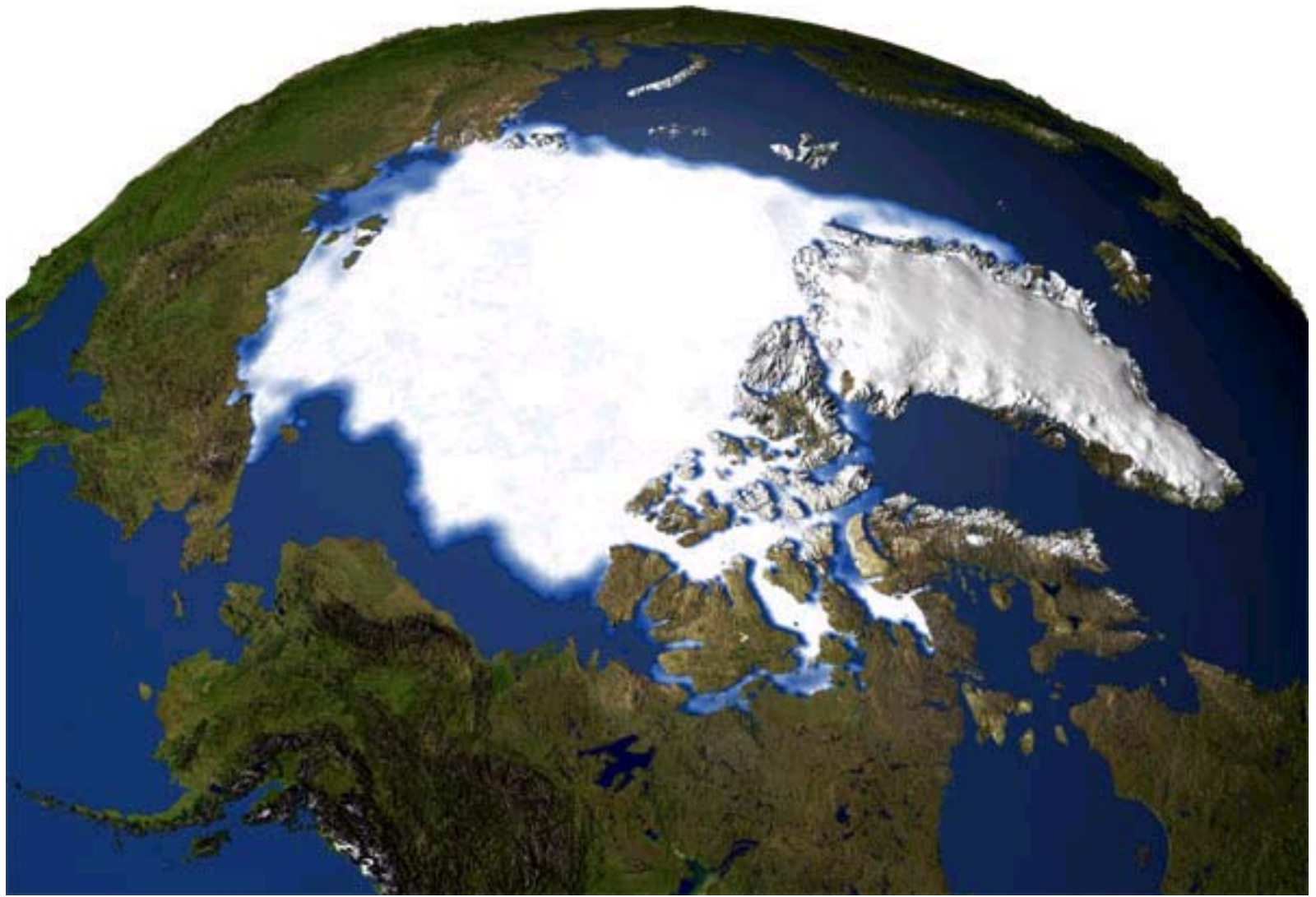




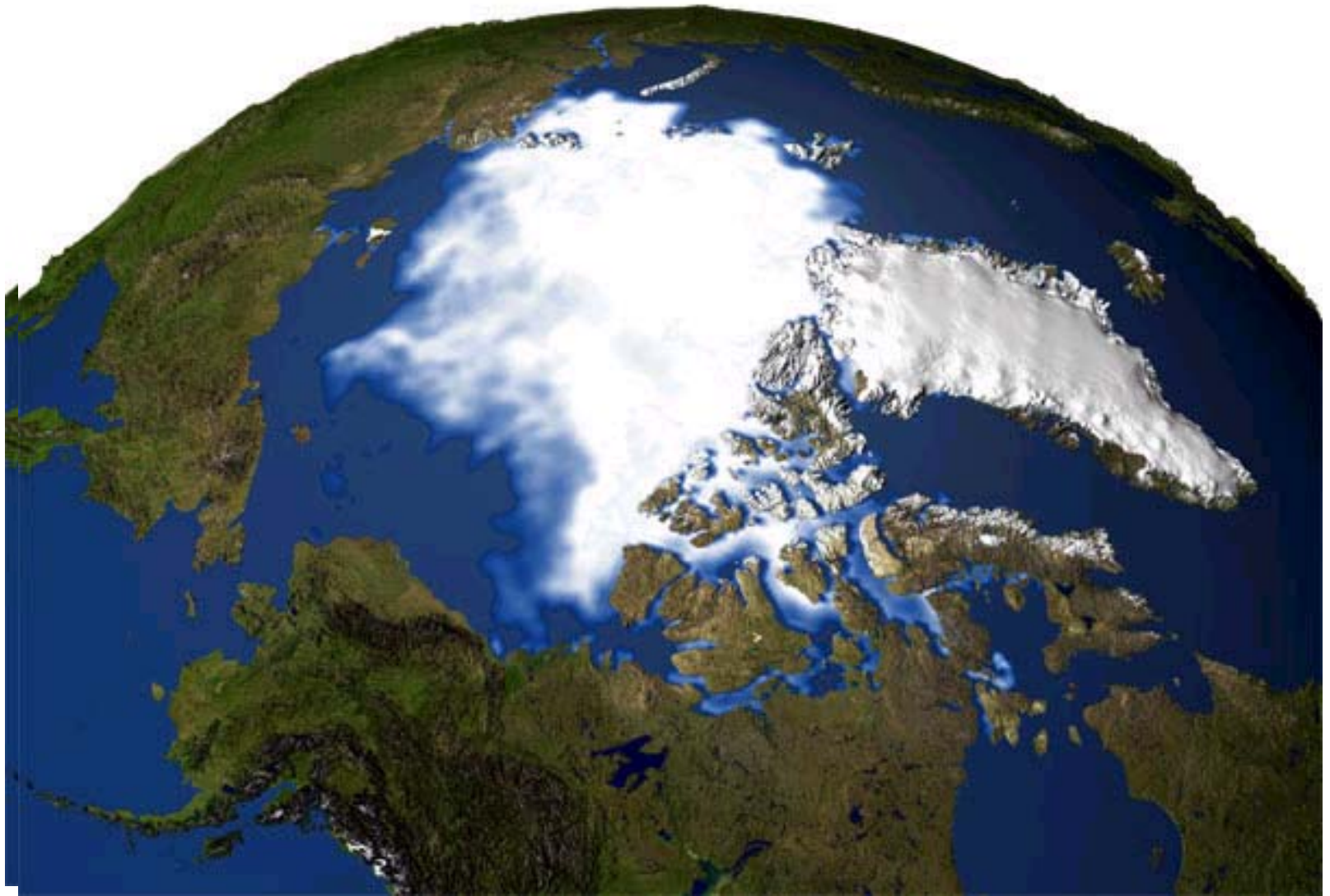
# Climate change



**How is this a problem?**







1979



2003



# What can Local Governments do to Address Global Warming?

*Local government policies affect all sources of global warming pollution*



Energy Use



Transportation & Planning



Solid Waste

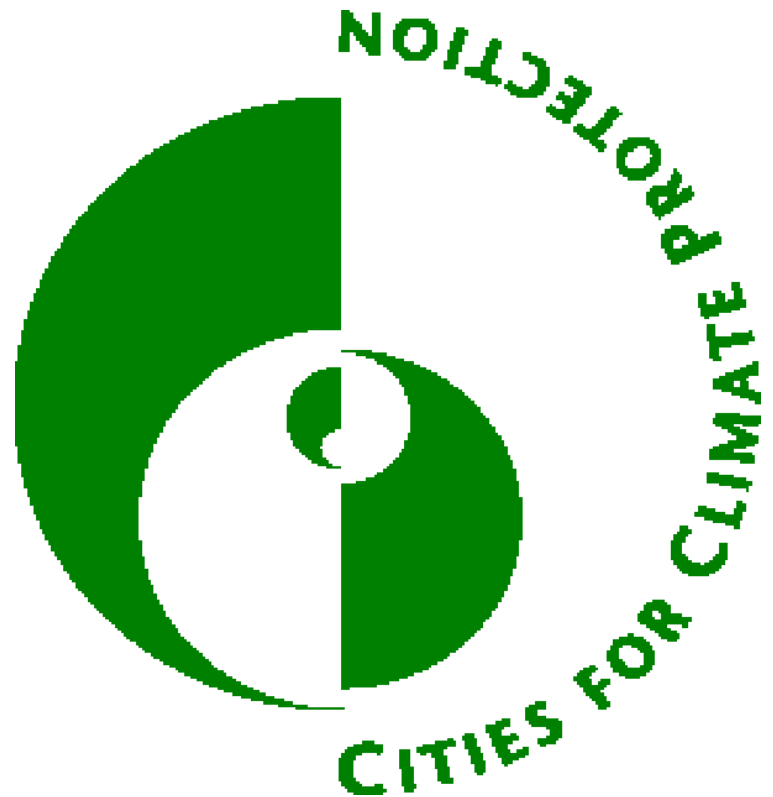


## Local Governments for Sustainability - I.C.L.E.I.

- International environmental agency of local governments
- Dedicated to equitable environmental & economic sustainability
- Organized in 1990, sponsored by the UN Environment Program
- 6000+ local government members from 6 continents & 50+ countries

# Cities for Climate Protection

- Initiated in 1993
- More than 600 municipal participants worldwide – 150 in the U.S.
- CCP municipalities represent 10%+ of international global greenhouse gas emissions resulting from human activity



## Five Milestone Framework

- **Conduct Baseline Emissions Inventory and Forecast**
- **Establish Emissions Reduction Target**
- **Develop Local Action Plan**
- **Implement Action Plan Measures**
- **Monitor and Verify**

## Benefits of the CCP Network

- Network of local governments
- Peer exchange opportunities
- Workshops – Northeast in 2005!
- Publications and outreach materials
- Planning tools and methodology
- Case Studies
- Interactive website
- Technical support
- Software

# CCP Software

- User-friendly
- Quantify greenhouse gas & air pollution emissions
- Quantify emissions from local government operations + community transportation, energy use, residential, institutional, waste sectors
- Generate reports for multiple audiences

The screenshot displays the 'CCP Greenhouse Gas Emissions Software' interface. The main window is titled 'Corporate Analysis for Year 2000'. It features a menu bar with 'File', 'Record', 'Report', 'Settings', and 'Assistants'. Below the menu bar, there are tabs for 'Community Analysis' and 'Corporate Analysis'. The 'Corporate Analysis' tab is active, showing a sub-tabbed interface with 'Buildings', 'Vehicle Fleet', and 'Employee Commute'. The 'Buildings' sub-tab is selected, displaying a form with 'Insert', 'Select', and 'Delete' buttons, and a 'Name of Building or Building Group' field containing 'Untitled'. To the right, a 'Report' button is visible. Below the form, there is a table of fuel types and their units, and a section for 'Indicator Inputs' with a field for 'Operating Hours'. At the bottom right, there is a section for 'Notes Regarding Building or Group Data'.

Fuel Type	Unit
Electricity	(kW)
Natural Gas	(cubic m)
Landfill Methane	(cubic m)
Sewage Gas	(cubic m)
Biogas	(cubic m)
Diesel	(litres)
Light Fuel Oil	(litres)
Heavy Fuel Oil	(litres)
Kerosene	(litres)

# What Cities Can Do

## Seattle, WA



**Race to Stop Global Warming**

### **Seattle City Light**

- Zero-Net Greenhouse Gas
- Offsetting 247,000 tons eCO<sub>2</sub>

### **1 Million kWh Conservation Goal**

### **Green Building Program**

- City buildings LEED silver

### **Solid Waste Management**

- 60% diversion from 1990



# What Cities Can Do

## Austin, TX



### **Solar Explorer Program**

- 32 kW photovoltaic system
- Austin Airport Taxi Stand

### **Green Power Development**

- 5% renewable power for entire community
- Cutting 255,000 tons CO2 per year

### **Energy Conservation**

- 50% projected growth in energy demand met by conservation and renewable sources
- Austin Green Builder Program

## Multiple Benefits of Climate Protection

- Improve air quality
- Reduce municipal operating costs
- Improve public health
- Reduce in traffic congestion
- Develop local economy
- Create local employment
- Improve quality of urban life

# Cities for Climate Protection in Tompkins County

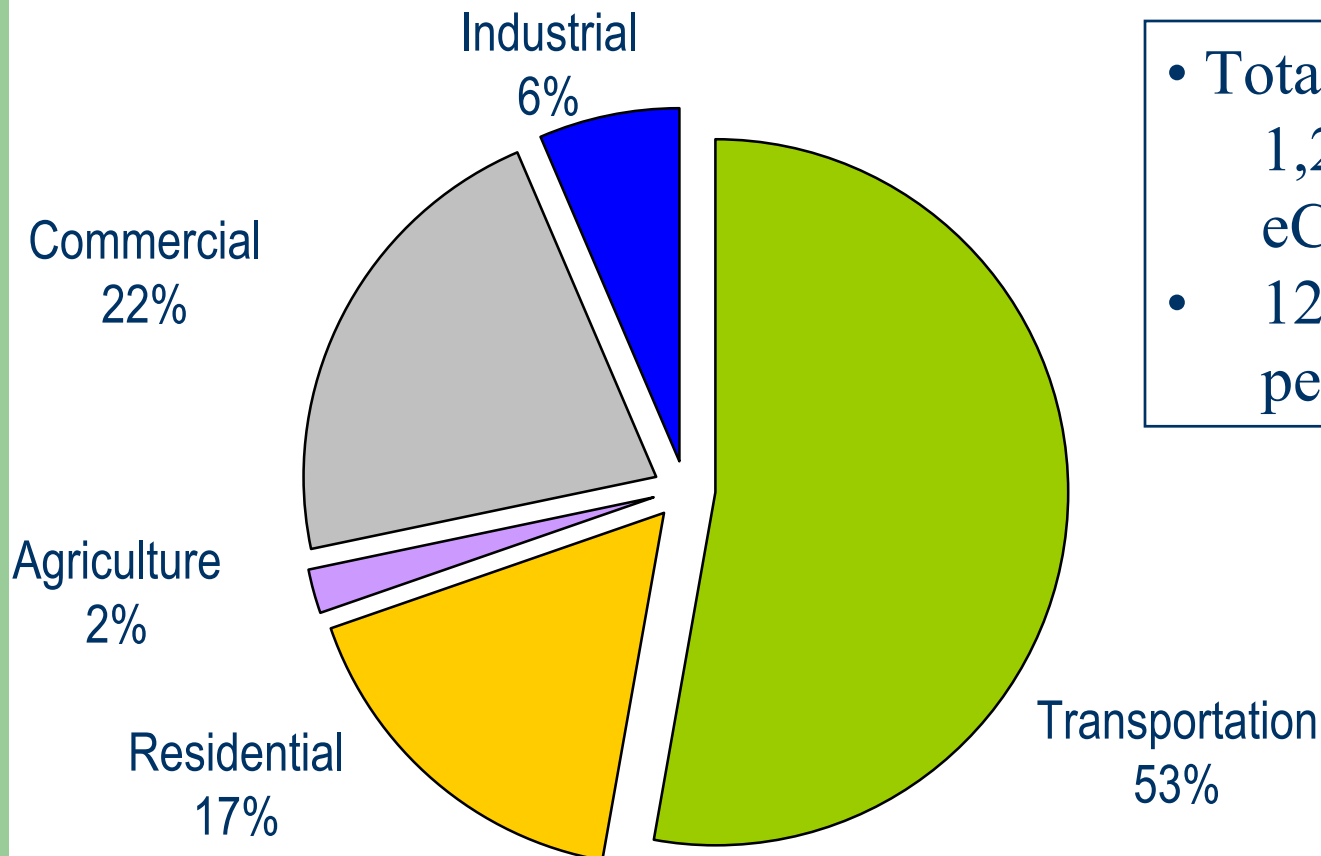


## **Milestone #1**

Baseline Emissions Inventory and Forecast  
(September 2001)



# Tompkins County Community GHG Emissions

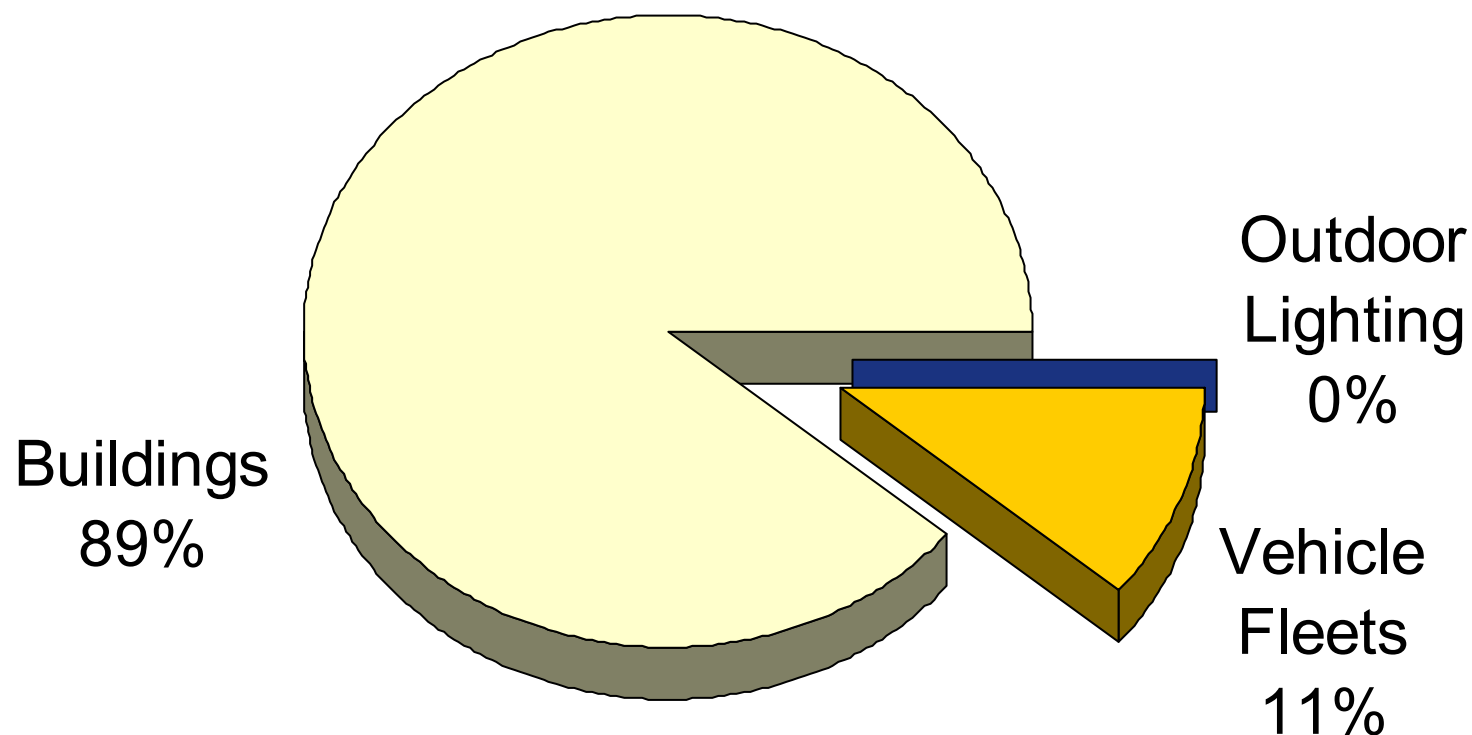


- Total Emissions:  
1,223,432 tons  
eCO<sub>2</sub>
- 12.7 tons eCO<sub>2</sub>  
per capita

# Tompkins County Government GHG Emissions



**Total Emissions: 6,849 tons eCO<sub>2</sub>**

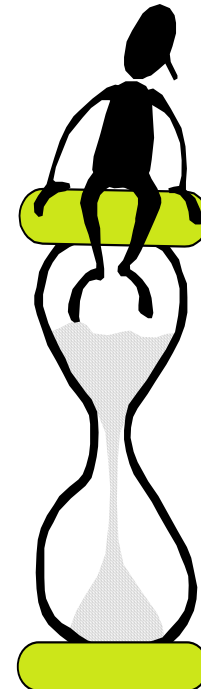


# 22 Years Later...



Tompkins County in 2020:

- Total Community emissions:  
1,401,907 tons eCO<sub>2</sub>
- Increase of 7.7% from 1998





# Cities for Climate Protection in Tompkins County



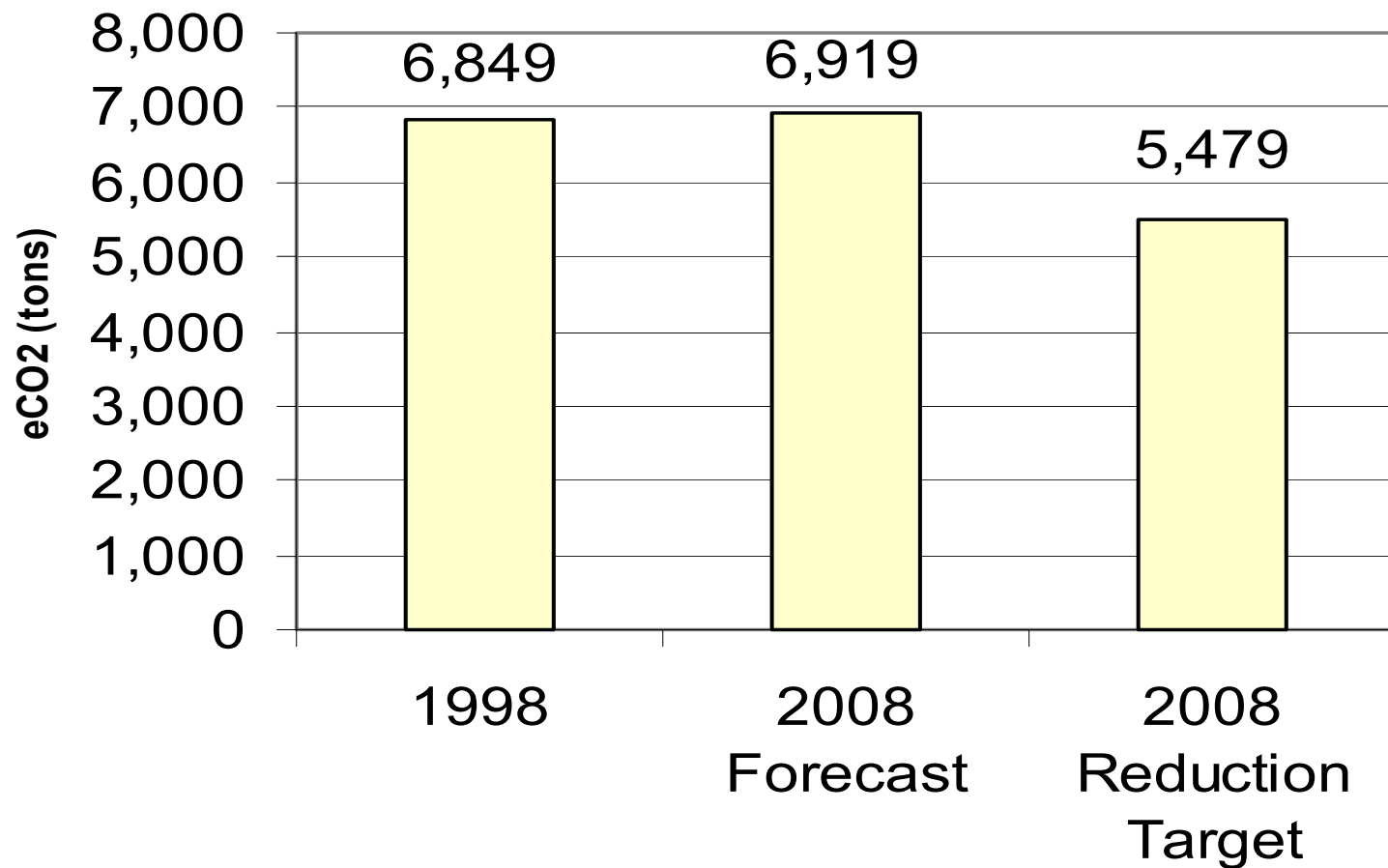
## Milestone #2

Set a reduction target  
(August 2002)

***“Tompkins County will, by 2008, reduce its emissions of greenhouse gases generated by county operations by 20 percent compared to the base year of 1998”***



**20% Reduction = 1,435 Tons eCO<sub>2</sub>**



# Cities for Climate Protection in Tompkins County



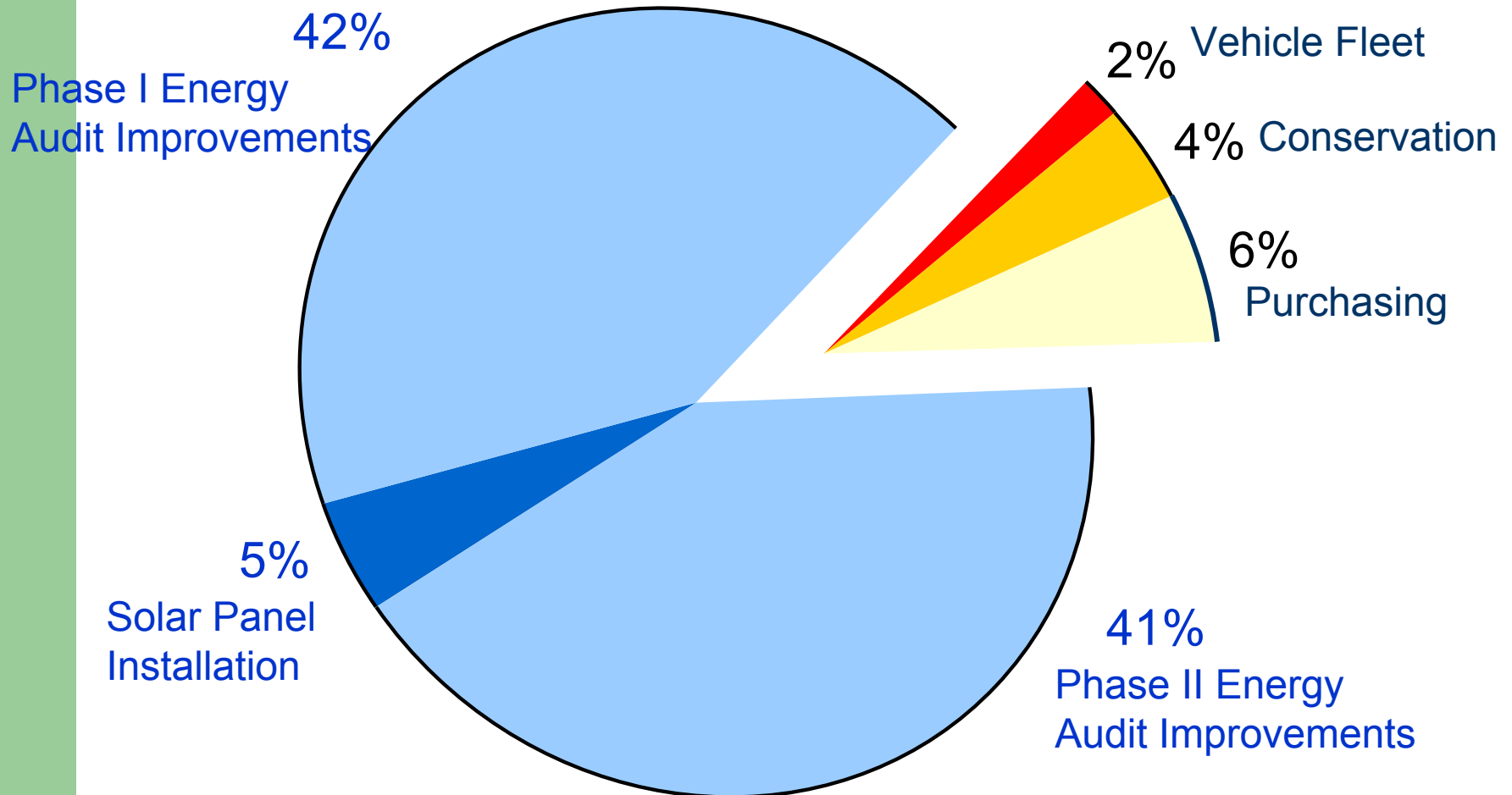
## **Milestone #3**

The Local Action Plan to Reduce County  
Government GHG Emissions

(June 2003)



# Local Action Plan Existing Measures (1998-2003)



# Tompkins County Library Solar Panels





# Building Efficiency Improvements – Energy Audits

## Phase 1

- NYSERDA – Flex Tech Program
- “low-cost” and “no-cost” measures
- \$94,000 estimated annual savings
- Energy reduction estimated at 10% (602 tons eCO<sub>2</sub>)







# Building Efficiency Improvements – Energy Audits

## PHASE II

- Energy Performance Contract
- More in-depth energy assessment
  - HVAC, Motor, energy management system, water conservation, boiler replacements
- \$86,000 estimated annual savings



# What can you do?

- Conservation energy
- Buy renewable electricity
- Curb you car
- Encourage local governments to
  - participate in Cities for Climate Protection
  - reduce their energy use.
  - purchase and produce green electricity
  - support low-income energy programs

## Contacts

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[www.epa.gov/globalwarming](http://www.epa.gov/globalwarming)

[www.iclei.org/us](http://www.iclei.org/us)

[www.nyserda.gov](http://www.nyserda.gov)

[www.energy.gov](http://www.energy.gov)